

DERWENT-ACC-NO: 2000-454756

DERWENT-WEEK: 200259

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TITLE: Pressure application roller manufacture for  
electrophotographic system, involves removing heat  
resistant cylindrical tube in outer surface of  
fluororesin tube after adhesion of elastic layer

INVENTOR: GOTO, M; IZAWA, S

PATENT-ASSIGNEE: CANON KK[CANO]

PRIORITY-DATA: 1998JP-0355412 (November 30, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6440347 B1	August 27, 2002	N/A	000	B29C 033/76
JP 2000161344 A	June 13, 2000	N/A	013	F16C 013/00

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 6440347B1	N/A	1999US-0449739	November 26, 1999
JP2000161344A	N/A	1998JP-0355412	November 30, 1998

INT-CL (IPC): B29C033/76, B29C045/14, B29C063/18, B29C063/42,  
B29C065/70, B29K027:12, B29L023:00, F16C013/00, G03G015/20

ABSTRACTED-PUB-NO: JP2000161344A

BASIC-ABSTRACT:

NOVELTY - A metal core (21) with outer diameter smaller than inner diameter of fluororesin tube (23) and the tube are inserted inside cylindrical metallic mold (31) so that core is almost central for mold. A heat resistant cylindrical tube (24) is interposed between inner and peripheral surfaces of mold and fluororesin tube respectively. The resistant tube is removed from mold after liquid rubber hardening process.

DETAILED DESCRIPTION - Liquefied rubber is injected in space between core and tube. The melting point of heat resistant cylindrical tube formed in outer surface of fluororesin tube is more than 200 deg. C. When the fluororesin tube is inserted into the mold, the fitting of each plug of fluororesin tube is carried out to both end face of mold by using fixing unit. An INDEPENDENT CLAIM is also included for pressure application roller.

USE - To manufacture pressure application roller for heat fixing apparatus used in electrophotographic system (claimed).

ADVANTAGE - Since heat resistant cylindrical tube is maintained to outer side of fluoro-resin tube during the adhesion of elastic layer to inner side of tube, the producing of damage to surface of roller is prevented. The mold release characteristic on the surface of roller is maintained sufficiently.

DESCRIPTION OF DRAWING(S) - The figure shows the longitudinal cross section view and top view of pressure application roller manufacturing apparatus.

Metal core 21

Fluoro-resin tube 23

Cylindrical tube 24

Metallic mold 31

ABSTRACTED-PUB-NO: US 6440347B

EQUIVALENT-ABSTRACTS:

NOVELTY - A metal core (21) with outer diameter smaller than inner diameter of fluoro-resin tube (23) and the tube are inserted inside cylindrical metallic mold (31) so that core is almost central for mold. A heat resistant cylindrical tube (24) is interposed between inner and peripheral surfaces of mold and fluoro-resin tube respectively. The resistant tube is removed from mold after liquid rubber hardening process.

DETAILED DESCRIPTION - Liquefied rubber is injected in space between core and tube. The melting point of heat resistant cylindrical tube formed in outer surface of fluoro-resin tube is more than 200 deg. C. When the fluoro-resin tube is inserted into the mold, the fitting of each plug of fluoro-resin tube is carried out to both end face of mold by using fixing unit. An INDEPENDENT CLAIM is also included for pressure application roller.

USE - To manufacture pressure application roller for heat fixing apparatus used in electrophotographic system (claimed).

ADVANTAGE - Since heat resistant cylindrical tube is maintained to outer side of fluoro-resin tube during the adhesion of elastic layer to inner side of tube, the producing of damage to surface of roller is prevented. The mold release characteristic on the surface of roller is maintained sufficiently.

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Metal core 21

Fluoro-resin tube 23

Cylindrical tube 24

Metallic mold 31

CHOSEN-DRAWING: Dwg.3/6

TITLE-TERMS: PRESSURE APPLY ROLL MANUFACTURE ELECTROPHOTOGRAPHIC SYSTEM  
REMOVE

HEAT RESISTANCE CYLINDER TUBE OUTER SURFACE TUBE AFTER ADHESIVE  
ELASTIC LAYER

DERWENT-CLASS: A14 A89 G08 P84 Q62 S06

CPI-CODES: A04-E10; A12-L05C1; G06-G08; G06-G08C;

EPI-CODES: S06-A06;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

018 ; P0500 F\* 7A ; S9999 S1661

Polymer Index [1.2]

018 ; ND07 ; K9698 K9676 ; K9574 K9483 ; Q9999 Q8991 ; Q9999 Q8617\*R  
Q8606 ; Q9999 Q8651 Q8606 ; N9999 N5721\*R ; N9999 N6440\*R

Polymer Index [1.3]

018 ; K9712 K9676

Polymer Index [2.1]

018 ; H0124\*R

Polymer Index [2.2]

018 ; ND07 ; K9698 K9676 ; K9574 K9483 ; Q9999 Q8991 ; Q9999 Q8617\*R  
Q8606 ; Q9999 Q8651 Q8606 ; N9999 N5721\*R ; N9999 N6440\*R

Polymer Index [2.3]

018 ; K9552 K9483

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-138896

Non-CPI Secondary Accession Numbers: N2000-338791